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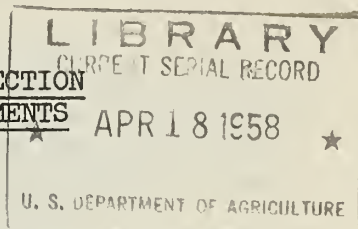
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Revised April 1957

U. S. DEPARTMENT OF AGRICULTURE

INFORMATION FOR APPLICANTS FOR FEDERAL MEAT INSPECTION
AND OWNERS AND OPERATORS OF OFFICIAL ESTABLISHMENTS

PROCESSING PLANTS (NO SLAUGHTERING)



Federal meat inspection is administered by the Meat Inspection Division of the Agricultural Research Service. The administrative offices are in Washington, D. C.

The purpose of the Federal Meat Inspection Act approved March 4, 1907, is stated in the Act as:

" . . . for the purpose of preventing the use of interstate or foreign commerce . . . of meat and meat food products which are unsound, unhealthful, unwholesome, or otherwise unfit for human food"

The Act is intended to assure a healthful and wholesome meat supply in interstate and foreign commerce. The inspection maintained at a plant covers the entire production of the plant regardless of the proportion shipped in interstate or foreign trade.

The Act of 1907 applies only to cattle (including calves), sheep, swine and goats, and the edible products derived from their carcasses. Its provisions are, however, extended to horses by the Horse-Meat Act approved July 24, 1919. The preparation, processing and handling of horse meat must be conducted in establishments wholly separate and apart from those preparing products derived from cattle, sheep, swine, and goats. Wild animals, poultry, fish, and game are not subject to its provisions. Food products derived from such species are subject to State laws and local ordinances, and, if shipped in interstate or foreign commerce, are subject also to the provisions of the Food, Drug and Cosmetic Act, administered by the Food and Drug Administration of the Department of Health, Education and Welfare. Dressed poultry and poultry products may also be inspected by the Inspection Branch, Poultry Division, of the Agricultural Marketing Service.

The cost of Federal meat inspection is paid by the Government insofar as the salaries of inspectors for services during regular hours are concerned. However, the packer is required to compensate the Government for the cost of overtime inspection. The cost of preparing, equipping, and maintaining the plant in condition to meet inspection requirements, and losses resulting from condemnation of animals, carcasses, or products must be borne by the owner or operator of the plant.

Under certain specific provisions of the Act, retail meat dealers and farmers may make interstate shipments of meats or meat food products

without operating under Federal inspection; however, the Secretary of Agriculture may, at his discretion, require that such persons apply and qualify for the inspection. The term "farmer", insofar as Federal meat inspection is concerned, is defined in the Meat Inspection Act.

The owner or operator of any meat processing plant who contemplates engaging in interstate or foreign trade in meat or products derived from cattle (including calves), sheep, swine, or goats, or furnishing such products to Federal agencies, should address the Director, Meat Inspection Division, Agricultural Research Service, U. S. Department of Agriculture, Washington 25, D. C., and furnish detailed information relative to the nature and volume of the proposed operations. In reply, he will be informed whether the proposed business requires or entitles him to Federal inspection, and if so, he will be furnished a form upon which he may make a formal application therefor. With such application he will be required to furnish plans and specifications of the proposed plant, as hereinafter indicated. Pending the receipt of information concerning the eligibility of the plant for the inspection, including the approval of plans and specifications, it is highly important that the applicant refrain from acquiring property, or undertaking construction, or remodeling for the contemplated operations, as failure to observe this suggestion may result in unnecessary expense and inconvenience.

Drawings to Accompany Application for Inspection

Blueprints or whiteprints of drawings with specifications, in triplicate, fully and clearly illustrating the applicant's plant as he proposes to have it constructed and equipped for the inspection should be submitted to the Meat Inspection Division at Washington, D. C., with the application for inspection. The drawings should include the following:

- (a) Plot plan of the entire premises showing location of all buildings, roadways, railroad trackage, streets and alleys adjoining the plant, streams, catch basins, water wells, reservoirs, and storage tanks. If nearby buildings exist on adjoining property, their height and use should be indicated. The character and surfacing of roadways, driveways, streets, and the paving of vehicular loading areas, and alleys should be indicated.
- (b) Floor plans of each level in the various buildings showing the locations of walls, partitions, posts, doorways, windows, and other openings; floor drainage inlets and gutters; rail systems for conveying carcasses, parts and product; chutes; location of the principal pieces of equipment; hot and cold water hose connections; and hand-washing facilities (lavatories). The slope of floors to drainage facilities should be indicated by grade lines. The location of sectional lines should be shown on the floor plans. For convenient

reference, it is desired that the north point be shown on the floor plans as well as on the plot plan.

- (c) Cross sections and longitudinal sections of the various buildings showing the character and finish of floors, walls, partitions, and ceilings; heights of ceilings; the principal pieces of equipment; and rails.
- (d) Exterior elevations on each side of each building showing locations and sizes of doors, windows and other openings.
- (e) Roof plan showing skylights, vents, and other pertinent information.
- (f) Specifications or notations (see Pages 13-17) covering features such as source of water supply; method of sewage disposal; description of the trapping and venting of drainage lines; description of hot water system; means to dispel steam and vapor in workrooms; and screens for outer openings that would admit flies. Notations applying to the project should be typewritten and may be placed directly on the drawings when space is available for this purpose, otherwise the typewritten notations shall be placed on separate sheets 8" x 10 $\frac{1}{2}$ " and attached to the set of drawings, the revised sheet, or the copy sheet with attached paster drawings as the case may be.

Size. The size of drawings illustrating the layouts should be on sheets not larger than 30" x 42". If the size of the project is such that all pertinent information cannot be fully detailed on one sheet, two or more sheets should be used. The "cut-off" in such cases must be adequately identified with match lines with a sufficient overlap shown on each sheet to facilitate proper interpretation of the drawings.

Legibility. Legibility and sharp clear lines on the drawings are essential since the Washington files are maintained in the form of microfilm records only and satisfactory film cannot be obtained from hazy drawings or those with insufficient contrast between the lines and background.

Scale. The use of the 1/4-inch to a foot scale is preferable in preparing drawings of layouts on the 30" x 42" sheets presented for consideration. No objections will be interposed to the use of the 1/8-inch to a foot scale if in the development of the layout it is found that its use is advantageous for the over-all illustration of the project and that it would tend to minimize the number of sheets required for the set of the blueprints and/or whiteprints; provided, that layouts of such principal departments as slaughtering, canning, boning, sausage, and the like where considerable equipment or operations are involved shall be detailed on a separate sheet at the 1/4-inch scale with a proper notation placed on the 1/8-inch scale drawings. Plot plans may be drawn on a smaller scale.

Changes. The Washington office discards the original approved drawings after microfilming. Accordingly, when changes are proposed in areas for which drawings have been previously approved, one of the following types of revised drawings should be submitted for review and consideration.

- (1) A completely revised sheet or sheets showing the existing construction and equipment which will remain unchanged, together with the proposed alterations and/or additions (preferable method) or
- (2) A copy of the previously approved sheet or sheets with previously approved pasters affecting the area and pasters of the proposed changes superimposed and securely affixed to the affected areas in a manner not obscuring essential data.

Paster drawings should be prepared to the same scale and presented on a background similar to that of the originally approved drawings to facilitate microfilming operations. When paster drawings are of a different background than the originally approved drawings, there is difficulty in obtaining proper recording on the microfilms.

Space for Approval Stamp. It is necessary that a contrasting space (white) at least 1 3/4" x 2 1/2" in size be provided on whole sheets of blueprints for the placement of the formal mark of approval. A similar space can be affixed to paster blueprints provided the arrangement will not obliterate any features shown on the whole sheet. Otherwise, the formal mark of approval will be affixed to the reverse side of the paster drawings. This requirement is not necessary when whiteprints are submitted.

If the examination of the drawings and specifications shows that they meet the requirements, the formal mark of approval is placed on them and an approved set is returned to the applicant. The other two sets are retained for reference.

Because of the specialized knowledge required to design and construct a well arranged meat packing plant, a competent architect or engineer experienced in laying out plants for operation under Federal meat inspection should be employed to prepare the drawings and specifications. Construction should be deferred until the drawings and specifications have been approved by the Meat Inspection Branch.

Location of Establishments

Features of primary importance in connection with the location of a processing plant operated under Federal meat inspection are:

Water Supply. Must be ample, potable (passing the tests prescribed for potability in the "Drinking Water Standards" promulgated by the U. S. Public Health Service, Department of Health, Education and Welfare,

dated February 6, 1946, or any subsequent revision), and distributed throughout the plant under adequate pressure and in quantities sufficient for all operating needs. Both hot and cold water should be provided, the hot water from a central heating plant of sufficient capacity or from other suitable facilities capable of furnishing an ample supply. Water from public water supply systems is usually, but not invariably, acceptable. If the water is supplied from private wells, the wells should be upon the premises of the establishment and effectively protected from pollution. A non-potable water supply is a potential source of danger. If such a supply is necessary for fire protection or for the condensers of the refrigerating system, it should be kept separate from the potable supply. If a cross-connection between the two supplies is necessary, it should be one that will adequately safeguard the potable supply, and be acceptable to the Meat Inspection Branch and local health authorities. Non-potable water lines within buildings in which edible products departments are located should be avoided. Vacuum breakers of an acceptable type should be provided on all steam lines and water lines connected to various pieces of equipment. If chlorinators are required to assure a continuous potable supply, they should be of the automatic type and provided with devices that inform the plant management and inspector when they have ceased to function.

Sewage Disposal. May be into a municipal sewer system and if this is permitted by local ordinance, it is most desirable. If the discharge is into a stream, the flow of water therein must be sufficient at all seasons of the year to carry the sewage well away from the plant and the method of disposal acceptable to local health authorities having jurisdiction over such matters. A letter from the proper health authority (state, county, city) indicating proposed sewage system is acceptable should be submitted to the inspector in charge before requesting a final survey of the plant before inauguration of inspection.

Expansion. In planning a plant, due consideration should be given to providing space and an arrangement of buildings that will permit of future expansion. To this end, coolers, freezers, processing departments, etc., should be so located that they may be enlarged without adversely affecting other departments. Features such as the inedible products departments and catch basins for grease recovery should be suitably located in the rear of the plant so as to avoid objectionable conditions affecting the preparation and handling of edible products.

Separation. An establishment operating under Federal meat inspection must be completely separated from any other plant and buildings, whether used for industrial, commercial, residential, or other purposes. No communications by means of doorways, windows, stairways, elevators, or passageways, loading or unloading platforms, or loading courts are permissible.

If a retail meat business is carried on within the official premises of the establishment, it shall be so arranged that customers shall have

access only to the room or rooms where such business is conducted and shall be excluded from the remainder of the establishment. All meat and meat food product handled in the retail business shall be U. S. inspected and passed and so identified when brought into the market.

Construction

Floors, Walls, and Ceilings. To promote good sanitation the floors, walls, and ceilings in the various workrooms should be constructed of material that can be readily kept clean. Wood structures and equipment are absorbent and difficult to keep clean, and for that reason the use of wood should be restricted as much as possible. (In lieu of dressed and matched lumber, the use of marine plywood or cement asbestos board, which are available in large sheets, is preferable as there are fewer joints that offer a harbor for roaches or other vermin). Floors requiring drainage should be constructed of impervious material, such as dense concrete or vitrified floor brick of good quality laid on a concrete base. Interior wall and, so far as structural considerations permit, ceiling surfaces should be smooth and flat. Wall surfaces in workrooms should be constructed of glazed brick, glazed tile, smooth Portland cement plaster, or other nonabsorbent material. Ceilings should be of good height (about 10 feet or more), and to avoid damage to glass in windows from impact of hand trucks, the window sills should be 3 feet or more above the floor. Window sills should be sloped about 45 degrees to promote sanitation.

Floors and Drainage. All parts of floors where wet operations are conducted should be well drained. A slope of about 1/4-inch per foot to drainage inlets is desirable for usual conditions. To avoid accidents, excessively smooth floors should be avoided. Good results have been obtained by laying concrete floors with a topping containing hard particles, such as carborundum, so as to afford a good foothold or by giving them a wood float finish. Each floor drain, including blood drains, should be equipped with a deep seal trap (P-, U-, or S-shape). The drainage lines should be of metal (cast iron or galvanized iron pipe) and at least 4 inches in diameter and properly vented to the outside air. Where several 4-inch lines discharge into one drainage line, this line should be of sufficient size to quickly carry away all drainage discharged into it. Drainage lines from toilet bowls and urinals should not be connected with other drainage lines within the building and should not discharge into a grease catch basin. Such lines should be located so that if leakage develops it will not affect product. Where there is likelihood that the water seals in traps will evaporate without replenishment from floor drainage, as in the case of dry storage rooms or freezers, the floor drains should be provided with suitable removable metal screw plugs.

Lighting. Unrefrigerated workrooms should be provided with means for furnishing adequate direct natural light and ventilation or an effective method for furnishing an ample volume of light and ventilation by mechanical means. Uncolored glass having a high transmissibility of light should be used in windows and skylights, and the glass area should

approximate one-fourth of the floor area of a workroom. This ratio should be increased where there are obstructions, such as adjacent buildings, overhead catwalks, and hoists, which interfere with the admittance of direct natural light. Well distributed artificial lighting of good quality is required at all places where, or at times when adequate natural light is not available or sufficient. The over-all intensity of artificial illumination should be not less than 20 foot candles. At all places where inspections are made or where special illumination is required to enable establishment employees to properly prepare products of any character to meet the requirements of the inspection, the illumination should be not less than 50 foot candles. To reduce glare, light diffusing and heat absorbing glass (blue) may be used in skylights and windows that are subjected to considerable sunshine.

Ventilation. Adequate means for ventilation should be provided in workrooms. This may be furnished by means of ventilating-type windows and/or skylights or by mechanical means such as a fan and duct system. In locations subject to the presence of dust and objectionable odors, such as those adjoining livestock pens, runways, inedible departments, etc., windows should be of the fixed type. In refrigerated workrooms where a considerable number of operatives are continuously employed, as in large cutting and boning rooms and bacon slicing rooms, where natural ventilation is limited, a reasonable amount of mechanical ventilation with fresh air should be continuously supplied to prevent stagnation of air.

Fresh air intakes for workrooms should be so located that the air is not contaminated with odors, dust, smoke, etc., and the intakes provided with effective filters to eliminate insects, dust, etc., and where indicated, a heating element for tempering the air in cold weather. Mechanical ventilating systems for non-refrigerated work areas depending entirely on artificial means of ventilation should have ample capacity to produce at least six complete air changes hourly.

Equipment

- (1) Equipment should be so constructed that it can be readily kept clean. Excepting equipment such as cutting boards, metal equipment should be provided. Rust-resistant metal such as 18-8 stainless steel is recommended for equipment such as meat mixers; sausage stuffers; silent cutters; curing boxes and vats; tops of sausage stuffing, boning, and other tables; bacon combs; the hooks of trolleys; tracks; track hangers; and storage racks for meat food products, etc.
- (2) Sheet metal coverings on sidewalls, posts, tops of wood tables, the inner surfaces of meat handling trucks, meat chutes, and curing and cooking containers, and concrete curing vats have been found unsatisfactory from the standpoint of sanitary maintenance and are not acceptable.
- (3) Equipment wasting water, such as soaking and cooking vats, can sterilizers, sausage stuffing tables, etc., should be installed so that waste water is delivered through an interrupted connection

into the drainage system without flowing over the floor. Soaking and cooking vats should be provided with overflow pipes at least two inches in diameter. The upper end of each overflow pipe should be equipped with an open-end cleanout tee to facilitate cleaning. Stationary equipment and equipment not readily movable should be placed at least 12 inches from floors, walls, posts, and other fixed parts of the building and from other equipment to facilitate ready cleaning of outer surfaces. Vent stacks from covered cooking vats and hoods over cook tanks should be so arranged as will preclude drainage of condensate back into the vats or tanks.

- (4) A separate washroom or area should be provided for cleaning curing vats, hand trucks, utensils and containers such as boxes and trays. The room or area should have adequate direct natural light and ventilation, impervious well drained floor, impervious walls and ceiling, and an exhaust fan for dispelling steam vapors.
- (5) Conveniently located hand-washing facilities (lavatories) with a minimum bowl size of 16" x 16" x 9" should be provided for the use of employees and inspectors. Each lavatory should be supplied with hot and cold running water delivered through a combination mixing faucet with outlet about 12 inches above the rim of the bowl to facilitate washing arms as well as hands; liquid soap in a suitable dispenser; an ample supply of sanitary towels; and a suitable receptacle for used towels. Lavatories in workrooms and toilet rooms should be pedal operated. Sterilizers should be constructed of rust-resistant metal, of sufficient size for complete immersion of knives, cleavers, saws, and other implements in scalding hot water and provided adjoining the lavatories and elsewhere as required. Each sterilizing receptacle should be provided with a water line, a steam line, or other means of heating, an overflow, and facilities for completely emptying the receptacle. One lavatory should be provided for every two sausage stuffing tables and so located as to be convenient to the stuffer operators. Lavatories should be directly connected to the drainage system.
- (6) Sanitary drinking fountains for the use of employees should be provided in large workrooms and in dressing rooms. If desired, they may be located at lavatories and so arranged that the overflows discharge into the bowls of the lavatories. If so located, they should be placed sufficiently high above the bowls to avoid splash onto them when the lavatories are used.
- (7) The locations of lavatories, lavatory-sterilizers, drinking fountains, and other similar features should be shown on the drawings.

General Requirements

- (1) The cooler facilities should have ample capacity for the volume of product which is to be handled. Cooler rails should be spaced

at least 2 feet from walls, columns, refrigerating equipment, and other fixed parts of the building. The type of refrigeration should be indicated, and, if wall coils are installed, a drip gutter of concrete or other impervious material integral with the floor and properly connected with the drainage system should be provided beneath the coils. If overhead refrigeration facilities are installed, insulated drip pans properly connected to the drainage system should be placed beneath them. Walls of coolers should be of impervious material and of such construction that they will not be damaged by the impact of hand trucks. The tops of cooler rails above the highest part of the floor should be at least 11 feet for halves of beef, 9 feet for hog carcasses with heads removed, and calves (trolleys 12 inches long), and 7' 2" for quarters of beef. Sheep carcasses should be suspended so that the hooks or gambrels are at least 6' 6" above the floor.

- (2) A suitable compartment should be provided in a cooler for holding retained product. The compartment should be separated from the remainder of the cooler by partitions of rust-resistant wire screen, number 9 gauge, one-inch mesh, or flat expanded metal of approximate gauge and mesh and extending from about 2 inches above the floor to the ceiling. The compartment should have a door of similar material at least 4 feet wide, equipped for locking or sealing.
- (3) Doorways through which product is transferred on rails or in hand trucks should be at least 5' 0" wide, except when such doors are used in connection with rails approximately 11' 0" high, doors at least 4' 6" wide will be acceptable.
- (4) Truckways should be unobstructed passageways having a minimum width of 5' 0" and no overhead storage rails. When truckways are in coolers having overhead rails, along a wall or adjacent boning tables, a horizontal distance of 7' 0" should be provided between the wall or table and the vertical of the nearest rail. Truckways should be clearly designated on the drawings.
- (5) Stairs should be of concrete or metal with solid treads and closed risers and have side curbs of similar material 6 inches in height measured at the front edge of the tread.
- (6) Elevator platforms should be at least 6' 6" x 7' 6".
- (7) Working surfaces of tables and other equipment should be not more than 34 inches above the floor where employees stand on the floor to conduct operations. Tables and equipment having higher working surfaces should be provided with suitable metal foot platforms or attached metal platforms for employees to stand on.

- (8) All tables or other equipment having water on the working surface should be provided with turned up edges. The height of the turned up edge depends on the volume of water used and operations conducted. In no instance should the turn up be less than one inch.
- (9) Beef boning and trimming, pork cutting, sausage chopping and mixing, and similar operations should be conducted in departments having a temperature not higher than 50° F. Such operations should be carried on in rooms separate from carcass or product holding coolers to avoid contamination of product by cleanup water or condensation during the cleanup time.
- (10) Bacon slicing and chip steak packing should be conducted in departments having a temperature not higher than 60° F.
- (11) Concrete paved areas, properly drained and extending out 20 feet from buildings or loading docks should be provided at places where vehicles are loaded or unloaded.
- (12) Railroad track gutters with suitable drainage should be provided where refrigerated railroad cars are loaded and unloaded. The top of the gutter should be below the bottom of the railroad ties unless the entire track area is paved.
- (13) Color changing tags should be provided in plants conducting canning operations for attachment to retort baskets containing canned product being placed in retorts for processing.
- (14) Every practicable precaution should be taken to keep official establishments free of flies, rats, mice and other vermin. Ratproof construction is recommended as an effective means of preventing infestation. Control of roaches is in a large degree dependent upon structural conditions. Therefore, types of construction which do not offer hiding places and harbors for vermin are highly desirable.
- (15) Catch basins for the recovery of grease should be suitably located and not placed near edible products departments or areas where edible products are unloaded from or loaded onto vehicles. To facilitate ready cleaning, such basins should have inclined bottoms and should be without covers. They should be constructed so that they can be completely emptied of their contents for cleaning, and hose connections for furnishing hot water for cleanup purposes should be provided at convenient locations near the basins. The area surrounding an outside catch basin should be paved with impervious material such as concrete and provided with suitable drainage facilities. Suitable facilities for the transfer of grease to the point of disposal, after it is skimmed from the basins, should be provided.

Condemned and Inedible Material. An inedible products room having impervious floor, walls, and ceiling, adequate floor drainage, hot and cold water hose connections, and direct natural lighting and ventilation should be provided for holding condemned and inedible material in water-tight metal containers pending its removal from the plant.

Welfare Rooms. Well located and properly separated toilet and dressing room facilities are required for employees of each sex. The number of employees using each dressing room should be given on the drawings. Each employee should be provided with a metal locker at least 15" x 18" x 60". To permit ready cleaning beneath the lockers, they should be raised about 16 inches above the floor on legs or other suitable supports. The lockers should have sloping tops. To maintain orderliness and to permit of ready cleaning of the floor under the lockers, it is desirable to provide a wood plank seat about 12 inches wide in front of and below the doors of the lockers. This seat should be mounted on an extension of the framework supporting the lockers. The aisle width between the removable wood seats should be about 5 feet. If a seat not attached to the lockers is preferred, it should be in the form of a wood or plastic seat securely fastened to the floor by means of a minimum number of pipe leg supports. When centrally located seats of this type are used, the lockers should be spaced with at least 6' 0" aisles.

Dressing rooms must be separated from adjoining toilet rooms by tight, full-height walls or partitions. A toilet room should not be entered directly from a workroom, but through an intervening dressing room or ventilated toilet room vestibule. Toilet rooms, dressing rooms, and toilet room vestibules should have solid, self-closing doors completely filling the doorway openings. Water closets should be provided in sufficient number for the employees using them (at least one unit for 25 men or 20 women). Toilet stalls should preferably be at least 5' 0" x 3' 0" in size and in no case less than 4' 0" x 2' 6". A sufficient number of modern type hand-washing basins (lavatories) are required in welfare rooms, and such rooms, particularly at plants where slaughtering operations are conducted, should be provided with suitable shower bath facilities. The floors of toilet rooms and dressing rooms should be of impervious material and pitched about 1/8-inch per foot to properly located floor drainage facilities. If stall-type urinals are installed, a step-up of concrete or other impervious material surfaced with ceramic or glazed tile, sloped to drain into the urinal should be provided. If the urinals are of the wall-type, floor drains should be provided immediately beneath such fixtures. Inside toilet rooms should be provided with an entrance door from the locker room having a grilled area in the lower section. The toilet room should then be provided with an exhaust fan and duct to the outside air. The exhaust fan and the artificial lighting in the area should be activated by a common switch.

To preclude insanitary conditions usually associated with employees eating lunches in edible processing departments, adequate lunching facilities consisting of tables and chairs (or benches), a lavatory and drinking

fountain should be provided for plant employees where plant cafeterias or nearby eating places are not available.

Inspector's Office. A well located inspector's office at least 7' 0" x 9' 0" is required at each official establishment. The office should be located so that it is not entered through a company office nor employees' welfare facilities, and it should be supplied with suitable furniture, including a desk and chairs; a metal clothing locker for each Government employee; a metal cabinet for the storage of supplies, and equipped for locking; and lavatory facilities. Shower bath facilities, while desirable, are not required in the inspector's quarters at establishments where only processing operations are conducted. Adequate separate toilet room facilities should be provided adjacent to and entered from the inspector's office.

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The foregoing covers some of the principal construction and equipment requirements of the Federal meat inspection service. This information is subject to change as found necessary, due to developments in methods, equipment, etc. Widely varying conditions are met in designing meat packing plants and, therefore, it is not practicable to furnish complete information for owners, architects, and engineers. If further information is desired, please communicate with the Washington office of the Meat Inspection Branch.

SUGGESTED NOTATIONS OR SPECIFICATIONS TO ACCOMPANY DRAWINGS
OF PROCESSING PLANTS COVERING DESIRED FEATURES
SOME OF WHICH SHOULD BE ALSO SHOWN ON THE DRAWINGS
(Subject to Variations Because of Differences in Projects)

BUILDING CONSTRUCTION

1. Portland cement plaster is to be used wherever the words "Cement Plaster" or the letters "P. C." appear on the drawings.
2. All walls are surfaced with glazed tile or Portland cement plaster having a steel trowel finish, unless otherwise noted.
3. All floors having drainage facilities are of brick or concrete and pitched about 1/4-inch per foot to floor drains. Floors where operations are conducted have a non-slip surface.
4. Ceilings are smooth and flat and have a smooth Portland cement plaster finish except as otherwise noted. If there are exposed joists or rafters in the ceilings, they are of dressed lumber and are spaced 36 inches or more center to center.
5. Dressed lumber is used for all exposed woodwork.
6. All exposed wood surfaces are painted with a good grade of oil paint or treated with linseed oil.
7. All window and door openings and other openings that would admit flies are provided with effective insect screens. Also, effective means are provided to preclude rodents from entering buildings.
8. Glass in windows and skylights has a high transmissibility of light. Effective measures such as the use of heat absorbing glass, glass block or monitors and sawtooth skylights with sash facing north, are taken to avoid objectionable heat and glare from the sun's rays during the summer season in workrooms.
9. Rails are placed not less than 2 feet from walls, posts, and other fixed parts of the building.
10. A compartment constructed of rust-resistant number 9 gauge wire screen, one-inch mesh, extending from about 2 inches above the floor to the ceiling is provided as indicated on the drawings. The compartment is for holding retained product. The door of this compartment is of similar material and is equipped for locking or sealing.
11. All doors of toilet rooms and dressing rooms and toilet room vestibules are solid, self-closing, and completely fill the openings.
12. All inside window ledges are sloped about 45°.
13. Doorways through which products are transferred on rails or in hand trucks are at least 5 feet wide, or in the case of doorways through which 11' 0" or higher rails pass, at least 4' 6" wide.

14. Suitable coves to facilitate sanitary maintenance are provided at junctions between walls and floors.
15. Glass block used in wall panels, etc., have smooth exposed surfaces.

WATER SUPPLY, PLUMBING AND DRAINAGE

1. The potable water supply is obtained from the city of _____ or a driven well or wells on the premises, effectively protected from pollution. (Designate source of supply).
2. An ample supply of hot water at adequate temperature and under suitable pressure and properly distributed throughout the plant is provided. Hose connections for supplying hot and cold water are provided in the various workrooms at the approximate locations shown on the drawings.
3. Floor drainage lines inside buildings are of metal and at least 4 inches in diameter, properly vented to the outside air to a point above the roof, and equipped with deep seal traps. All floor drains and vent lines are provided with facilities to exclude rodents.
4. Each lavatory (hand-washing basin) is supplied with hot and cold water delivered through a combination mixing faucet with outlet about 12 inches above the rim of the bowl, liquid soap in a suitable dispenser, an adequate supply of sanitary towels, and a suitable receptacle for used towels. Lavatories in workrooms are foot pedal operated.
5. Sanitary drinking fountains are provided in processing and dressing rooms. If placed adjoining a lavatory, they are located high enough to avoid splash from the lavatory.
6. All equipment wasting water is installed so that waste water is delivered into the drainage system without flowing over the floor.
7. The grease catch basin is constructed so that it can be completely drained of its contents for cleaning daily and is without cover for ready inspection. Grease skimmed from the basin is placed in water-tight metal containers and promptly removed from the plant. A hose connection for supplying hot water for cleaning the basin is provided in a convenient location. Area around basin is paved with concrete and provided with drainage facilities. The construction of the basin is shown on detail drawing.
8. The sewage from the plant is disposed of by discharging it into the city sewer system (furnish description of facilities if other method of disposal is employed).

EQUIPMENT

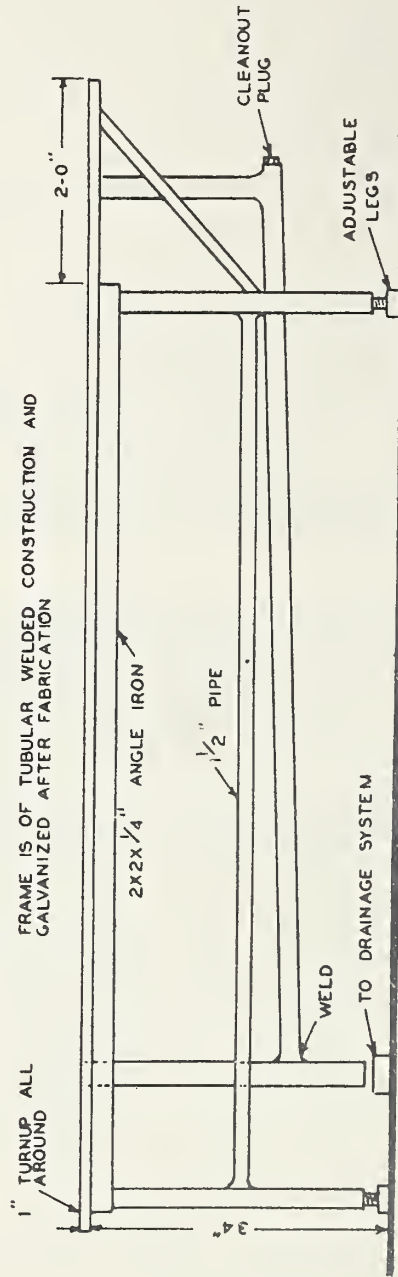
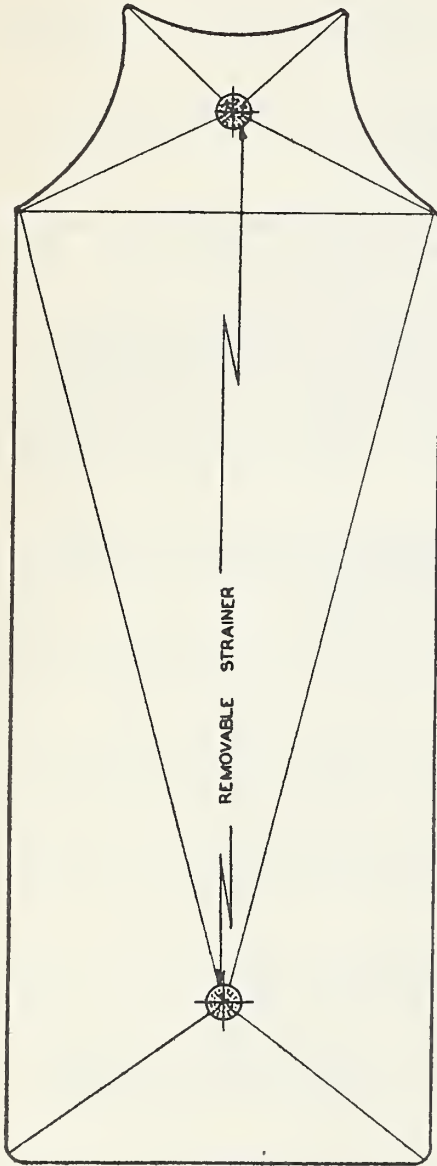
1. All stationary equipment not readily movable is placed not less than 12 inches from floors, walls, and ceilings and other stationary equipment to facilitate ready cleaning of outer surfaces.
2. All equipment, except cutting boards of boning tables and the like, is of rust-resisting metal and so constructed that it can be readily kept clean.
3. The inspector's office is provided with a suitable desk and chairs and two metal lockers of at least the size provided for employees, one with hooks for clothing and the other with shelves for supplies. Each of these lockers is equipped for locking.
4. Each employee is provided with a metal locker at least 15" x 18" x 60", having a sloping top and with bottom elevated on legs about 16 inches long. Removable wood seats about 12 inches wide are provided in front of and below the doors of the lockers and are attached to the framework of lockers or (a single wooden seat about 12 inches wide securely attached to the floor by a minimum number of pipe leg supports is located about 2' 6" in front of the lockers). The dressing room will be used by not more than (give number and sex of employees).
5. Lockers have effective means for ventilation, such as doors having louvered openings or open grill of adequate size or doors constructed of expanded metal or heavy wire mesh.
6. A suitable room or space and facilities for washing gambrels, beef hooks, and other equipment are provided in a convenient location as shown.
7. A suitable room or space for the storage of supplies, such as wrapping paper, cartons and containers, is provided in a convenient location as shown. Racks for storage of supplies are 12 inches high.
8. Chutes for the transfer of product are so constructed that they can be readily cleaned (long chutes, due to difficulty of cleaning, should be avoided). Chutes are round in shape or otherwise have well rounded corners.

GENERAL

1. Condemned and inedible material is transferred to the inedible products room and placed in suitable water-tight metal containers and removed daily, or more often if deemed necessary by the inspector in charge, to an outside rendering plant for disposal. Suitable facilities for washing the containers used for such materials are provided in the room.

2. Each workroom and compartment is provided with artificial lighting of good quality having an intensity of at least 20 foot candles for general illumination and at least 50 foot candles at places where inspections are performed and where plant operations require establishment employees to properly prepare products of any character to meet the inspection requirements.
3. Heat to dispel steam and vapor is provided in unrefrigerated workrooms.
4. Refrigerated rooms are maintained at a temperature not higher than 50° F. or as indicated on the drawings.
5. The coolers are refrigerated by means of (give type of and show locations of refrigeration units). Overhead refrigerating units have insulated drip pans beneath them, properly connected to the drainage system. Floor-type refrigerating units are placed in curbed-in areas, having separate drainage facilities. Wall refrigerating coils have drip gutters of impervious material, such as concrete, beneath them properly connected to drainage system.
6. Empty cans are washed in an inverted position with water having a temperature of at least 180° F. immediately before filling.
7. An incubation room for incubating samples of fully processed canned meat product is provided as shown on the drawings. The room is of adequate size for holding not less than one percent of fully processed canned product from each run of each retort for at least ten days. The temperature in the room is maintained by thermostatic control at approximately 98° F. and the room provided with a recording thermometer located on an outside wall so as to be visible without entering the room. The shelves are made of expanded metal. The sensitive elements of the thermostat and recording thermometer are below the bottom shelf. The floor in the room is pitched to a floor drain equipped with a removable screw plug. The door of the room is equipped for locking with a M. I. B. padlock or seal.
8. Vegetables are stored in bulk in a suitable separate room and are handled so as to avoid dissemination of dust. Suitable facilities for preparing vegetables for use in product are provided. Vegetables such as celery and potatoes are thoroughly washed before being cut up into smaller pieces as by dicing.
9. Effective means are taken to prevent back-siphonage of liquids into the potable water supply or steam lines. Back-siphonage of liquids into potable water supply is prevented by placing water lines to equipment, such as cooking vats and similar equipment using water, higher than the highest level reached by liquids in the vats, etc.
10. Cooking vats and like equipment are provided with overflow pipes at least 2 inches in diameter having open-end cleanout tees at their upper ends and are connected to the drainage system by means of interrupted drains.

11. A suitable room or separately drained area is provided for washing hand trucks, boxes, trays, demountable parts of sausage stuffing equipment, etc. Two suitable compartments with entrance rails are provided for washing smokehouse cages and trees. The first compartment is used for washing cages and trees with a detergent solution and the second for rinsing this equipment with clean water after treatment with the cleaning solution.
12. Outer clothing of employees, press cloths, etc., are laundered at the plant laundry (or at an outside laundry).
13. Roadways on the premises adjoining the plant are hard surfaced and have a binder of asphalt, tar or cement.
14. Toilet soil lines are separate from house drainage lines to a point outside of the building and by-pass the grease catch basin. (If there is one at the plant).
15. Effective means, such as expanded metal or wire with a mesh not exceeding 1/2-inch embedded in the walls and floors at their junctions and extending vertically and horizontally an adequate distance, are provided to exclude the entrance of rats and other rodents into rooms.
16. Floor openings for chutes, etc., and for stairways, except at entrances, have curbs of impervious material, such as concrete, at least 12 inches high to exclude floor drainage.
17. Stairways have side curbs 6 inches high measuring at the front edge of the step.
18. A suitable metal table with top about 3' x 5' is provided in an unobstructed space in a cooler for holding returned product for inspection.
19. Boning and cutting operations are conducted in departments having a temperature of approximately 50° F.
20. Sawdust is conveyed to and ashes removed from smokehouses in metal containers having tight fitting lids.
21. Smoke-making equipment and ducts are so located that all outer surfaces can be readily cleaned.
22. Retorts are charged by (describe means). Retorts drain into curbed and drained areas or pits or are connected to the drainage system by interrupted drains.
23. Color changing tags are provided to attach to retort baskets to identify product that has been retorted.
24. Revolving-type smokehouses are provided with suitable facilities for complete cleaning with a detergent and rinsing with clean hot water.



**SAUSAGE STUFFING
TABLE**
STAINLESS STEEL WORKING SURFACE